

## 3 R's



## From The Cradle To The Grave

Grade Level : 6

**Subjects:**

Science 4.2, 5.1, 5.2  
Communication Skills  
1.0, 2.0

**Time:**

two to four class periods

**Setting:**

classroom, media center

**Materials:**

research materials such  
as encyclopedias, CD-  
Rom, books, maga-  
zines, Internet access  
(if available)

**Skills:**

analyzing, interpreting

**Vocabulary:**

biodegradable  
photodegradable  
raw materials  
processing

**Source:**

*AVR Teacher's  
Resource Guide*  
Association of  
Vermont Recyclers

**Summary:** Students working in groups of 5-6 will research a packaging product to determine its over-all environmental impact. Information gathered will be shared creatively in skits, plays, raps, etc.

**Objective:** Students will understand the total impact of a product, from raw materials to disposal.

**Background:** Some packaging materials have "hidden environmental costs." Examples are the mining of bauxite for aluminium, the bleaching of wood pulp for paper, disposal cost, transportation cost, etc. All these have environmental consequences sometimes overlooked when evaluating packaging.

**Leading Question:** When you recycle an aluminum can, do you know how much energy was involved in producing the aluminum? Do trees create "white paper"?

**Procedure:**

1. Assign each group one of the following materials to research:
 

a) aluminum,	(e) glass bottle
b) plastic bottle	(f) waxed paper
c) cardboard	(g) polystyrene
d) mixed metal (food can)	(h) aseptic package

 (List can be extended)
2. Each group will research their product from beginning to end. (cradle to grave)
3. Students will write and perform skits, play, raps to illustrate information gathered.
4. Evaluate each packaging product as low, medium, or high as to environmental impact.

**What Now?**

1. What packaging materials are not worth the price?
2. Can we, as consumers, reduce the impact of certain materials used in packaging?
3. Write letters or e-mail to companies that use "high environmental impact" packaging asking them to reconsider the choice for packaging their product. Search the Internet for trade associations to find out new technologies that are less polluting. Write letters of appreciation (or e-mail) for environmental concerns.

